### **Drainage and Wastewater**

### **Regulation of Development**

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## How does Drainage and Wastewater work in the City?

In the City of Seattle, all proposed development is checked for its impact on existing drainage and wastewater infrastructure. A Master Use, Building or Street Use Permit will not be issued until all concerns regarding drainage and wastewater have been addressed. Infrastructure improvements may be required as a condition of the permit when existing infrastructure is unavailable or inappropriate. The City and King County share jurisdiction and infrastructure in some parts of Seattle, so in some cases a permit may also be required from King County (see King County Drainage and Wastewater Services:

http://www.kingcounty.gov/environment.aspx

#### **Drainage**

Drainage refers primarily to the flow of storm water to the sea, a lake or another natural water repository, or to a combined sewer. Drainage can also include relatively clean water from other sources, such as groundwater, that needs to be managed. Seattle's Drainage Code, SMC 22.800-22.808, has been revised effective 11/30/09. The revised code has new requirements for green stormwater infrastructure when certain developement thresholds are exceeded. More information on the Drainage Code, Directors Rules, and related CAMS can be found at http://www.seattle.gov/dpd/codes/stormwatercode/cams/default.asp

#### **Wastewater**

Wastewater refers to sewage, such as that released by toilets, bathtubs, commercial applications, or other everyday sources of contaminated water. Not all contaminated water can be disposed of as wastewater in the City or King County sewer system. Water contaminated by petroleum products, certain chemicals or bio-hazardous materials cannot be

treated effectively by the County's sewage treatment facilities, and must be pre-treated by a specialized facility, typically on site, or managed in another way.

### What is the City trying to achieve in regulating this area?

The City regulates Drainage and Wastewater ultimately for the health, safety and well-being of its residents and public and private property.

### Drainage is regulated for several reasons:

- To protect natural resources and public health by reducing erosion and pollution.
- To reduce flooding and property damage by managing the City drainage infrastructure.
- To reduce costs to ratepayers by protecting the integrity of the City drainage infrastructure.

### Wastewater is regulated for mostly similar reasons:

- To protect public health and the environment by providing the infrastructure for the safe removal and treatment of household, commercial and industrial wastewater.
- To manage the capacity of City and King County wastewater infrastructure and wastewater facilities.
- To reduce costs to ratepayers by protecting the integrity of the City and King County wastewater infrastructure.

Originally, a combined drainage and wastewater sewer system was used throughout the central areas of the City. Over time, separate storm drains, detention facilities and a variety of drainage systems were constructed.

As City limits were expanded, additional drainage systems were added to the City's infrastructure.

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(This memo provides a general introduction only, and is not a substitute for a careful reading of the law and consultation with the City.)



### How does the City regulate drainage and wastewater?

Seattle Public Utilities addresses Drainage and Wastewater through various local provisions in the Seattle Muncipal Code:

- 21.16 Side Sewers
- 21.28.280 Drainage and Wastewater Fund
- 21.33.010-.110 Drainage Utility Rates and Charges
- 22.800-.808 Stormwater Code
- 22.904.210 Surface Water Drainage.
- Directors Rules 2009-15, 16, 17, 18

http://www.seattle.gov/dpd/Codes/StormwaterCode/ Overview/default.asp

The Seattle Municipal Code is available online. To locate any of the sections listed, please go to http://clerk.ci.seattle.wa.us/~public/code1.htm

Note: See also King County Code for County regulations

# What types of development projects or activities are affected by the drainage and wastewater regulations?

- New or replaced impervious surface or landdisturbing activity, whether on public or private property, or in the public right of way.
- Any projects modifying, relocating, or repairing sewers or drains, or connecting to SPU infrastructure.

### In general, what are the developers responsibilities regarding drainage and wastewater?

- Property owners are responsible for properly conveying all stormwater, groundwater and wastewater to an approved discharge location. Detention, treatment, or green stormwater infrastructure requirements may be imposed.
- Any development plans for a property must be adequately communicated to the City in time to be reviewed and approved prior to implementation. Development plans must describe how the property is to be used, estimated wastewater to be generated at the property, and the amount of impervious surface to be added to, or replaced on the property. The plans must detail how any anticipated groundwater, stormwater or wastewater will be treated and removed from the property, including conveying flows received from upstream properties.

### Things to consider if you are thinking of buying a property for development.

- Are there stormwater and wastewater pipes adjacent to your property? If not, you may have to pay to extend lines to your property.
- Do the existing stormwater and wastewater lines have the capacity to meet the needs of your proposed project? (Existing stormwater and wastewater lines can normally accommodate flows from one single family home.) In some cases, you may need to pay to increase the capacity.
- Will your planned project produce high flows, dirty or contaminated runoff (a car wash, for example?) If so, you may need to install treatment and/or detention systems on your property or in the right-of-way.

#### What are the steps of the process?

Normally, the steps will be identical to those of any other Master Use, Building or Street Improvement permit. However, if your project is determined by DPD or Seattle Department of Transportation (SDOT) to have potential drainage or wastewater issues, your project will have to meet the requirements detailed by the City before your permit will be approved. In some cases, King County may require a permit or authorization for your project.

### What information will the developer need to provide?

- Project description and plans
- Geological study of project site (if required)
- A description of the street with topological data (i.e. base map)
- A construction stormwater control plan
- Building and street grades
- Curb height
- Estimated generated wastewater
- Area of impervious surface added or replaced

# What are the requirements of a construction project?

- Properly treat or dispose of any groundwater displaced during construction (temporary dewatering) Refer to CAM 506 at http://www. seattle.gov/DPD/Publications/CAM/cam506.pdf
- Implement a stormwater control plan
- Implement spill prevention and control to protect water quality

### Reduce delay! Things to watch out for that have caused problems in the past.

- Changing the plans after they have been approved by the City reviewers can result in new Drainage and Wastewater requirements.
- Note that DPD Building permits, SDOT Street Use permit and Drainage and Wastewater requirements are all interdependent. Plan changes affecting requirements from one department may trigger changes in another department's requirements.

#### **Contacts:**

#### Who to contact first

The initial contact for a project will normally be Seattle's Department of Planning and Development.

http://www.seattle.gov/dpd/

Who to contact for specific types of questions

For sewage or drainage billing questions: (206) 684-3000

To report a problem with drainage or sewer pipes or other infrastructure, call SPU Dispatch at:

(206) 386-1800

DPD Side Sewer information and Dewatering questions:

(206) 684-8850

sidesewerinfo@seattle.gov

For other drainage and wastewater permitting questions: (206) 386-0028

dww.spu@seattle.gov

#### References

#### Manuals

2008 Standards Plans and Specifications for Municipal Construction http://www.seattle.gov/util/Engineering/ Standard\_Plans\_&\_Specs/index.asp

#### Other Publications

**DPD Drainage CAMS** 

http://www.seattle.gov/dpd/camlist/

CAMList.asp?Sort=Series#500

King County Combined Sewer Overflow Program

http://www.kingcounty.gov/environment/

wastewater/CSO/Program.aspx

King County Wastewater Treatment

http://www.kingcounty.gov/environment/wtd/

About.aspx

King County Code

http://www.kingcounty.gov/courts.aspx

SDOT Street Use Permits

www.seattle.gov/transportation/stuse\_home.htm